

Pomegranate Production



Ali Sarkhosh, Assistant Professor & Extension Specialist

UF | **IFAS Extension**
UNIVERSITY *of* FLORIDA

History

- The pomegranate tree is native from Persia
- Has been cultivated since ancient times throughout the Mediterranean region



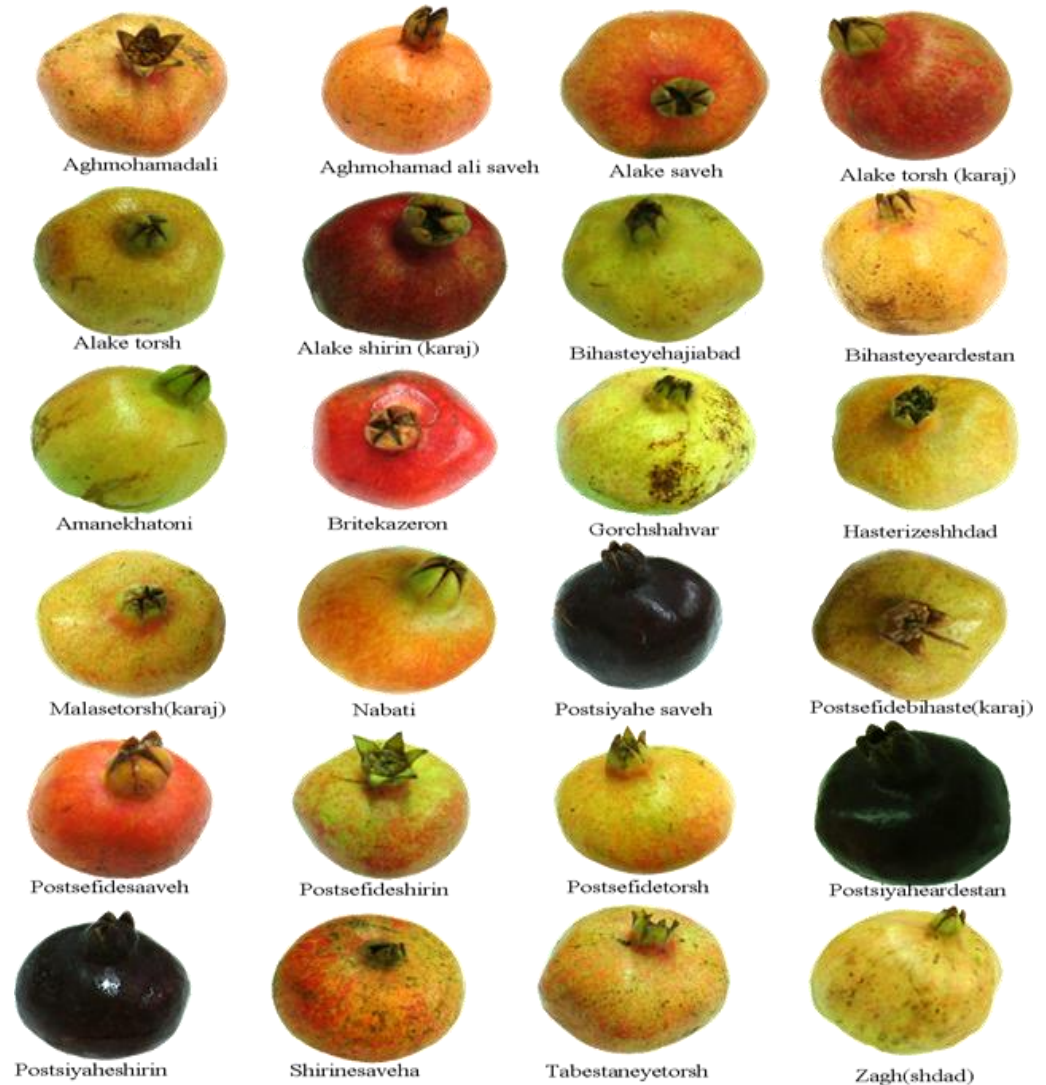
Economics of production



- ✓ As fresh fruit from ancient time
- ✓ Wide range of climate and soil condition
- ✓ Pomegranate components act against serious diseases such as diabetes, cancer (skin, breast, prostate)



Genetic diversity and fruit characteristics



Ornamental Varieties



What are the pomegranates characters we look for?

- Early ripening varieties
- Late varieties for long storage
- Colored skin and colored arils
- Fruit size: medium – large
- Arils size: large
- Smooth seeds: soft or semi-soft
- Taste: sweet or sweet-sour
- Easy release of the arils from skin



Climate

- This tree is primarily mild-temperate to subtropical
- The fully dormant tree can severely injured by temperatures below 12 °F
- Young tree and non-dormant tree can injured by higher temperatures, below 25 °F



Freezing damage

Freezing damage recovery



Soil

- The tree can grow in a wide range of soils, from sand to loam-clay (pH 5.5-7.5)
- It is recommended to plant the tree on the raised bed in heavy soil, rainy area,



If possible keep the moisture around the tree crown low!



Install the dripper or micro-jet sprinkler far from the crown from year 2

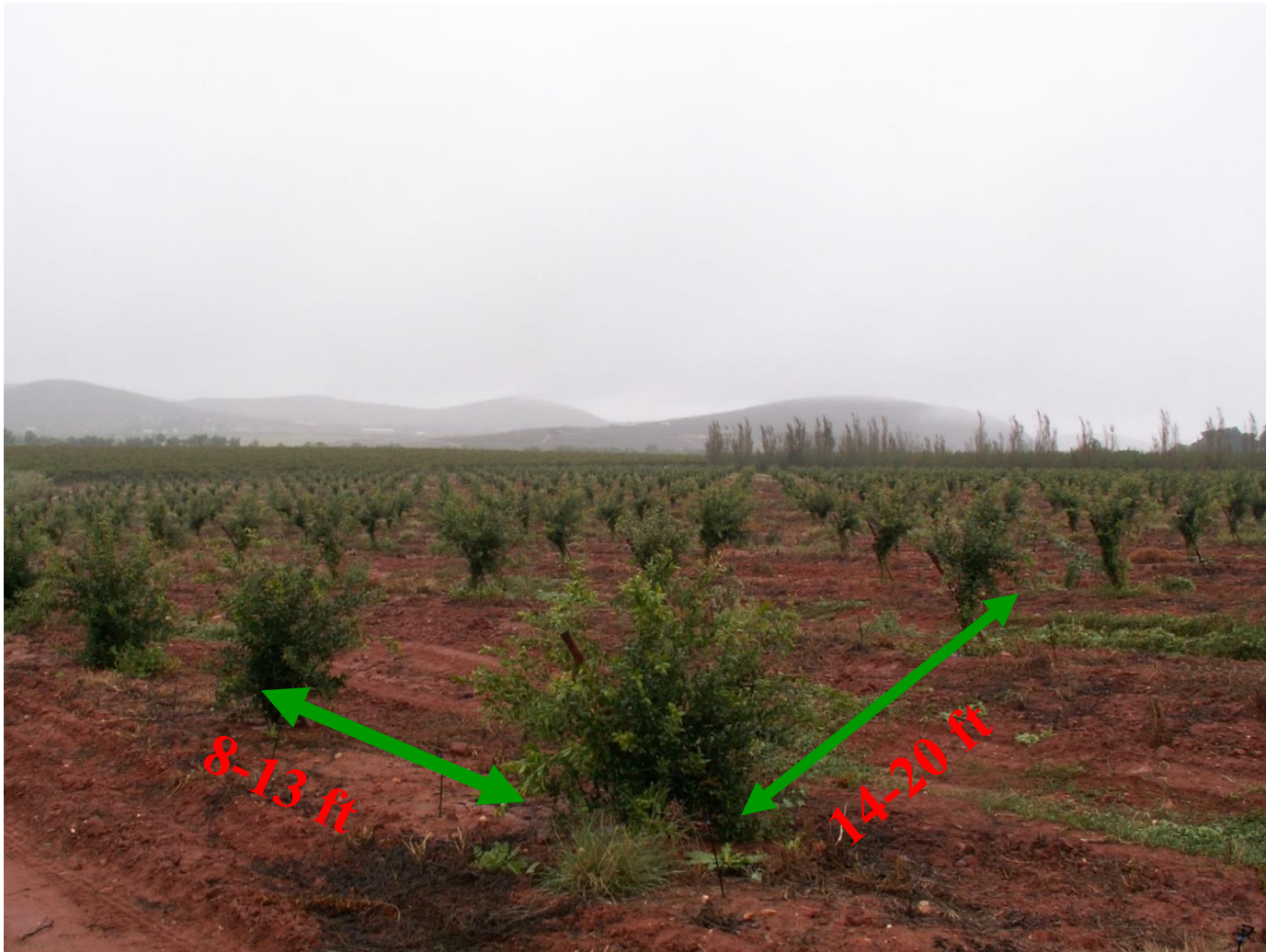
Phytophthora crown rot

Propagation

Pomegranate is usually reproduced by hardwood cuttings



Tree spacing



Training & Pruning

- Tree formation
- Fruiting
- Renovation
- Light penetration
- Spraying penetration



Pomegranates tree is generally trained as multi-trunks



Multi-Trunks

➤ Advantage

Less tree/acre

More fruit/acre

➤ Disadvantage

Lower marketable fruit rate

Level of mechanization is low

More de-suckering/pruning

More harvesting time



Multi-Trunks: how you start



Multi-Trunks: 2nd year

Select 3-5 main trunks



After pruning in Spring

Multi-Trunks: 3rd year



Multi-Trunks: 3rd year



Multi-Trunks: 3rd, 4th



Multi-Trunks: 4th, 5th



Suckering habit



Sucker control; manually/chemically



Manually; by hand or pruner





Fruit thinning
2 fruits/cluster
3 or more fruits/cluster



Fruit thinning stage



Keep one fruit/cluster

Fruit cracking

- Genetic
- Irrigation
- Temperature
- Ca deficiency



Sunburn



Kaolin



Scrubbing



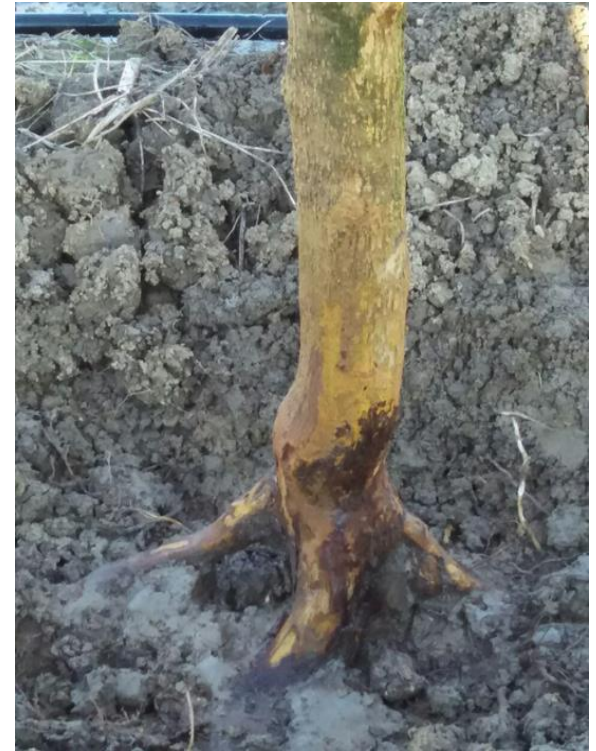
Diseases



Anthracnose



Botryosphaeria



Phytophthora



Botryosphaeria



Botryosphaeria

Diseases

Alternaria and Aspergillus Rot as a Preharvest Defect

Infection begins in the orchard especially following rain during flowering and early fruit development. The Fungus can grow within the fruit without external symptoms.



Alternaria Rot



Aspergillus



Insects



Flatheaded wood borers



Aphids



Red spider mite



Soft scales

Angel Red??



Ariana



Crab



EG



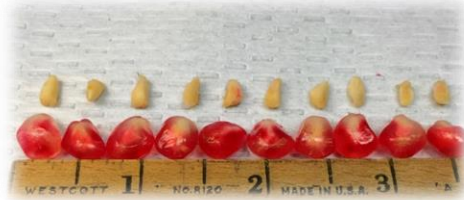
Ever Sweet



Girkanet



Kara Bala Mi Ursal



Mack Glass



Molla Nepes



Parfianka



Red Silk



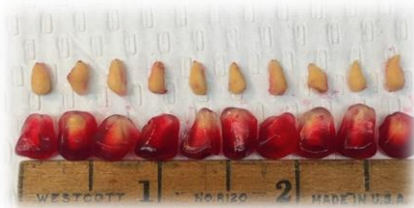
Sweet



Vietnam



Vkusnyi





Thank you!